

Table S1. Biofilm forming bacterial isolates alone and in combination for pesticides and dyes biodegradation

Groups	Biofilm forming bacterial isolates alone and in combination with each other	Test Compounds
P1	<i>B. thuringiensis</i> 2A	Pesticides (Cypermethrin and Imidacloprid)
P2	<i>E. hormaechei</i> 4A	
P3	<i>Bacillus</i> sp. 5A	
P4	<i>B. cereus</i> 6B	
P5	<i>B. thuringiensis</i> 2A + <i>E. hormaechei</i> 4A	
P6	<i>B. thuringiensis</i> 2A + <i>Bacillus</i> sp. 5A	
P7	<i>B. thuringiensis</i> 2A + <i>B. cereus</i> 6B	
P8	<i>E. hormaechei</i> 4A + <i>Bacillus</i> sp. 5A	
P9	<i>E. hormaechei</i> 4A + <i>B. cereus</i> 6B	
P10	<i>B. cereus</i> 6B + <i>Bacillus</i> sp. 5A	
P11	<i>B. thuringiensis</i> 2A + <i>E. hormaechei</i> 4A + <i>Bacillus</i> sp. 5A + <i>B. cereus</i> 6B	
D1	<i>L. sphaericus</i> AF1	Dyes (Malachite Green and Congo Red)
D2	<i>Bacillus</i> sp. CF3	
D3	<i>Bacillus</i> sp. DF4	
D4	<i>L. sphaericus</i> AF1 + <i>Bacillus</i> sp. CF3	
D5	<i>L. sphaericus</i> AF1 + <i>Bacillus</i> sp. DF4	
D6	<i>Bacillus</i> sp. CF3 + <i>Bacillus</i> sp. DF4	
D7	<i>L. sphaericus</i> AF1 + <i>Bacillus</i> sp. CF3 + <i>Bacillus</i> sp. DF4	

Table S2. Screening of biofilm producers from isolates obtained from pesticides and dyes contaminated effluents

Bacteria strains	Biofilm producer	Bacterial strains	Biofilm producers
2A	+	6A	–
2B	–	6B	+
3A	–	AF1	+
3B	–	BF2	–
4A	+	CF3	+
4B	–	DF4	+
5A	+	EF5	–
5B	–	FF6	–

+ = Positive (biofilm producer, showed black colour); – = negative (non- biofilm producer, red in colour)

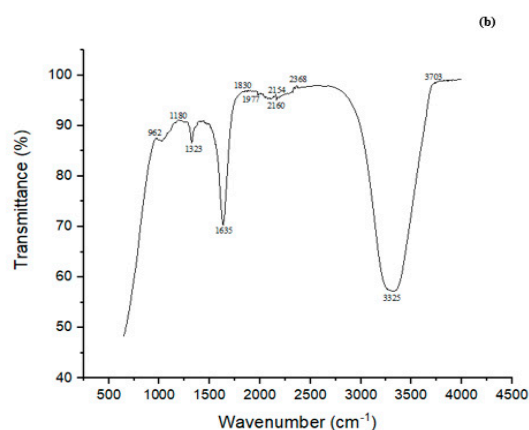
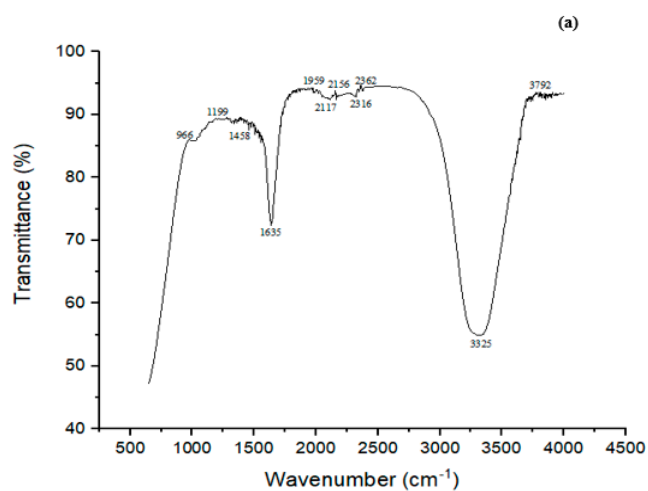
Table S3. Morphological characteristics of bacterial isolates

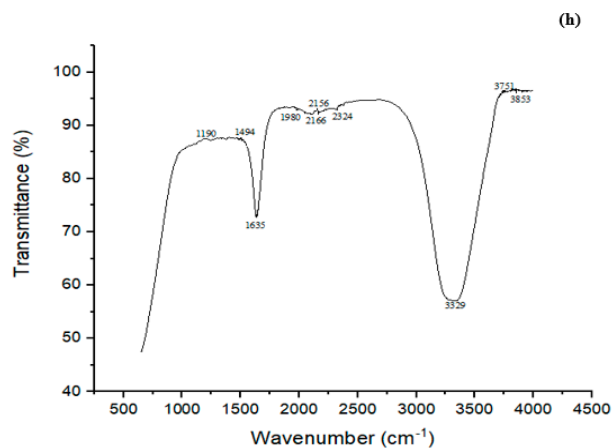
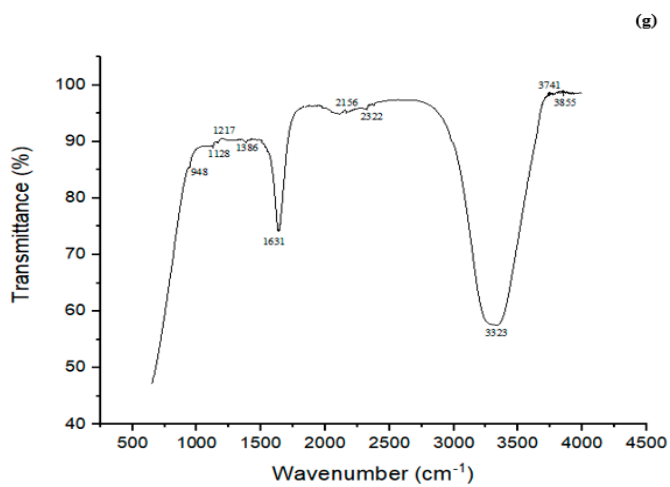
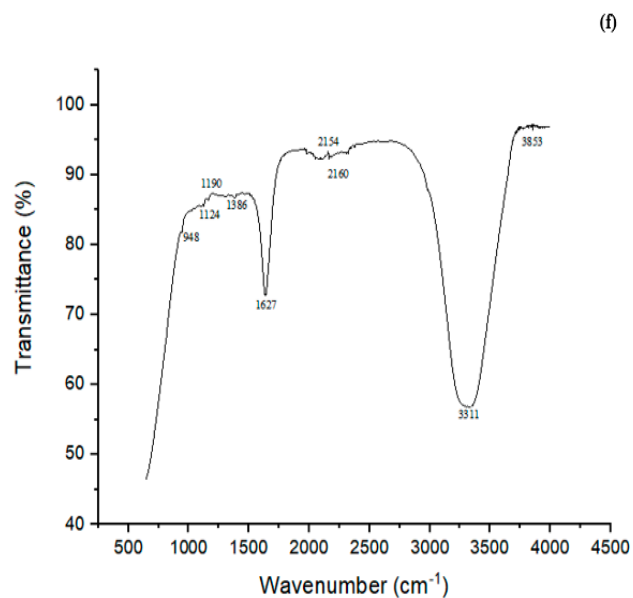
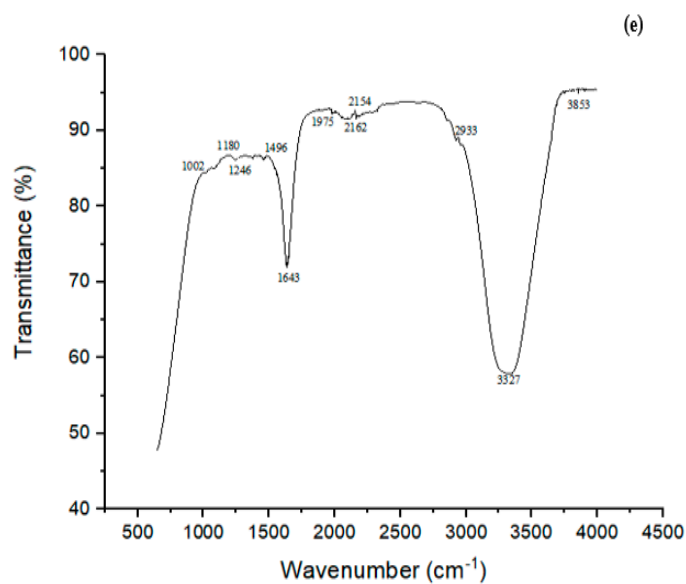
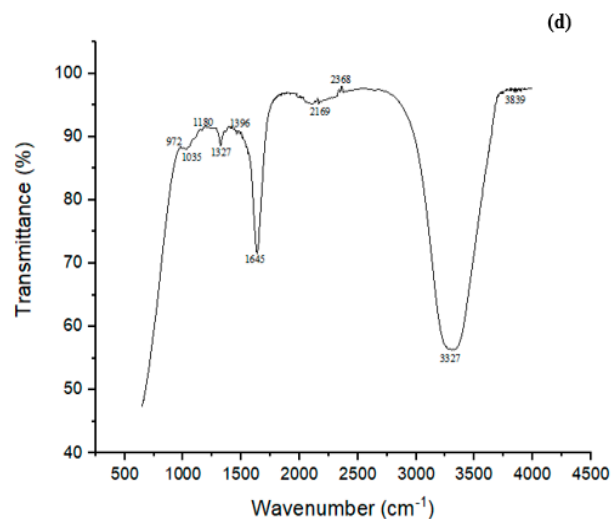
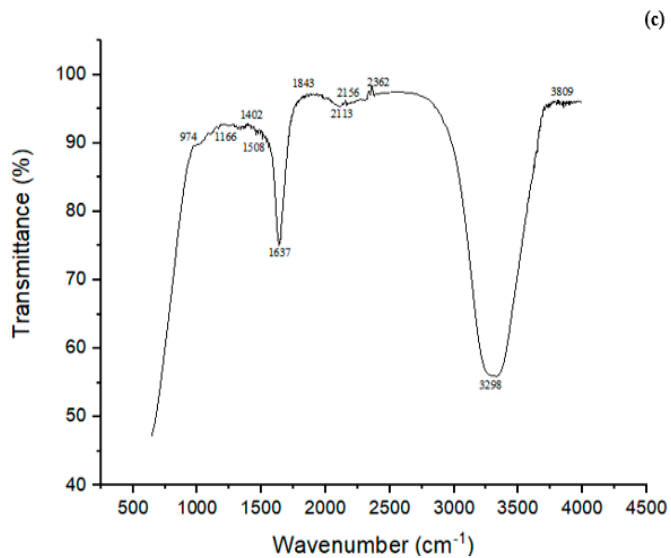
Characteristics	2A	4A	5A	6B	AF1	CF3	DF4
Gram Staining	Positive	Positive	Positive	Positive	Positive	Positive	Positive
Shape	Rod	Circular	Circular	Rod	Circular	Circular	Rod
Color	Dark brown	Red	Cream	Dark brown	White	Yellowish	Off-white
Margin	Entire	Entire	Entire	Entire	Entire	Entire	Entire
Elevation	Raised	Raised	Umbonate	Complex	Flat	Raised	Flat
Opacity	Opaque	Opaque	Opaque	Opaque	Opaque	Opaque	Opaque
Surface	Smooth	Smooth	Smooth	Smooth	Smooth	Smooth	Smooth

Table S4. Biochemical characterization of bacterial isolates

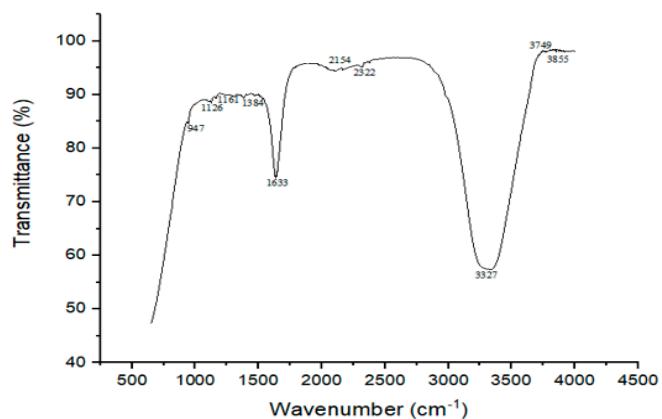
Tests	2A	4A	5A	6B	AF1	CF3	DF4
Starch	+	+	+	+	-	-	-
Urease	+	+	-	+	-	-	-
Catalase	-	+	+	-	+	+	+
Glucose	+	+	+	+	+	-	-
Sucrose	+	+	+	+	-	-	-
Lactose	+	+	+	+	-	+	+
Methyl-red	+	+	+	+	-	+	-
Voges-Proskauer	+	+	+	+	-	+	-

+ = Positive; - = negative for each test

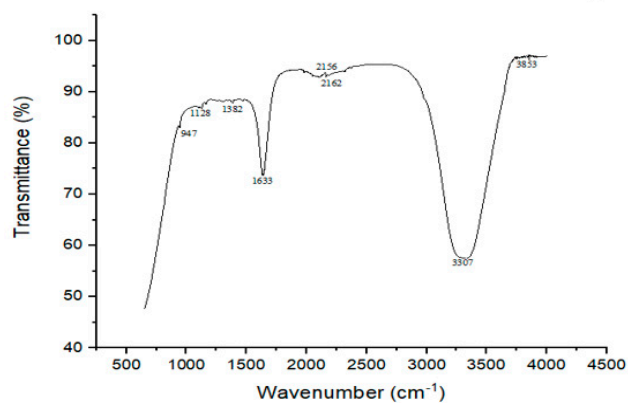




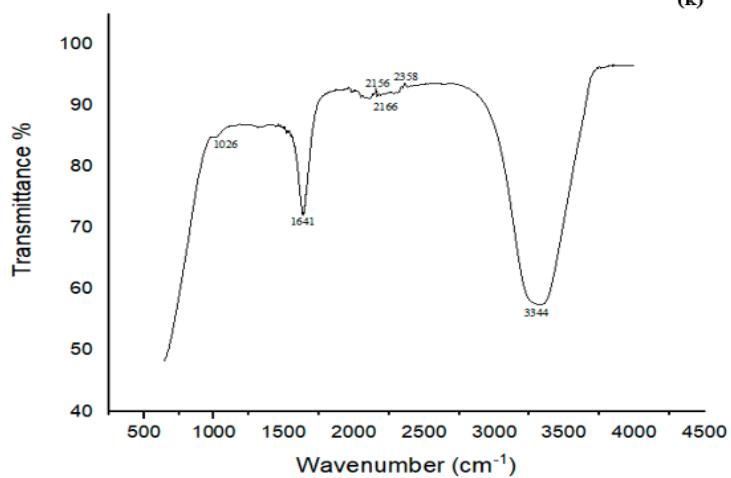
(i)



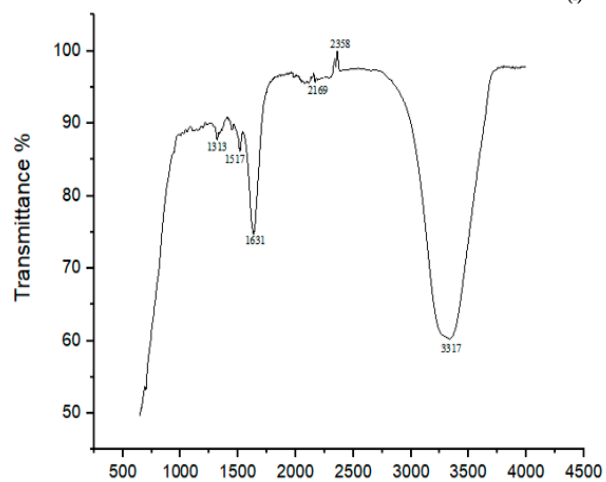
(j)



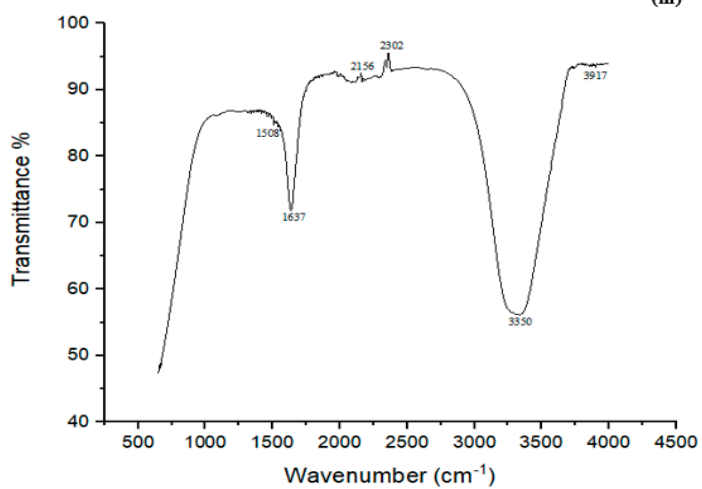
(k)



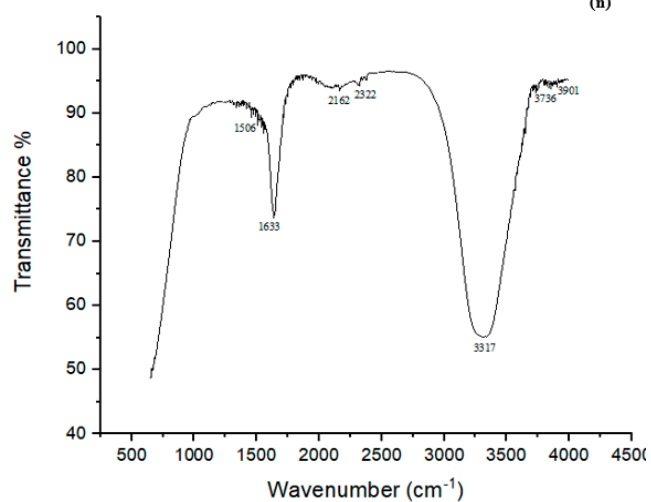
(l)



(m)



(n)



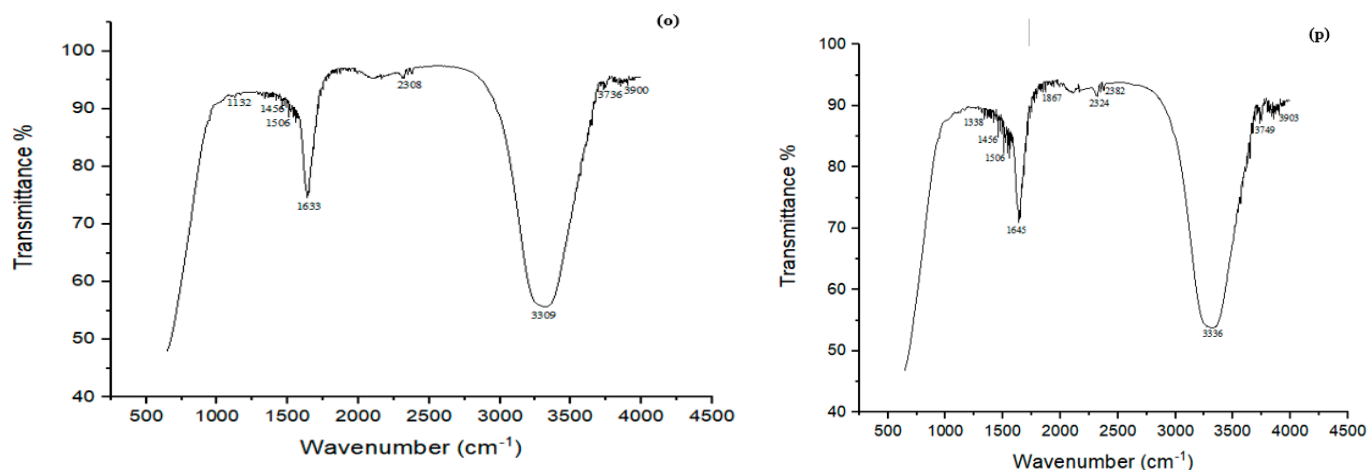


Figure S1. FTIR spectra of biodegraded CYP, IMI, MG and CR. (a) CYP after treatment with biofilm of *B. thuringiensis* (g1) (b). CYP after treatment with biofilm of *E. hormaechei* (g2), (c) CYP after treatment with biofilm of *Bacillus* sp. (5A) (g5), (d) CYP after treatment with biofilm of *B. cereus* (g4) (e). CYP after treatment with mixed culture of *B. thuringiensis*. + *E. hormaechei* + *Bacillus* sp. (5A) + *B. cereus* (g11). (f). IMI after treatment with biofilm of *B. thuringiensis* (g1) (g). IMI after treatment with biofilm of *E. hormaechei* (g2) (h). IMI after treatment with biofilm of *Bacillus* sp. (5A) (g3) (i). IMI after treatment with biofilm of *B. cereus* (g4) (j). IMI after treatment with biofilm of mixed culture of *B. thuringiensis* + *Bacillus* sp. (g7) (k). MG treated with biofilm of *L. sphaericus* (g1), (l). MG treated with biofilm of *Bacillus* sp. (CF3) (g2), (m). MG treated with biofilm of *Bacillus* sp. (DF4) (g3), (n). CR treated with biofilm of *L. sphaericus*, (g1), (o). CR treated with biofilm of *Bacillus* sp. (CF3) (g2), (p). CR treated with biofilm of *Bacillus* sp. (DF4) (g3).

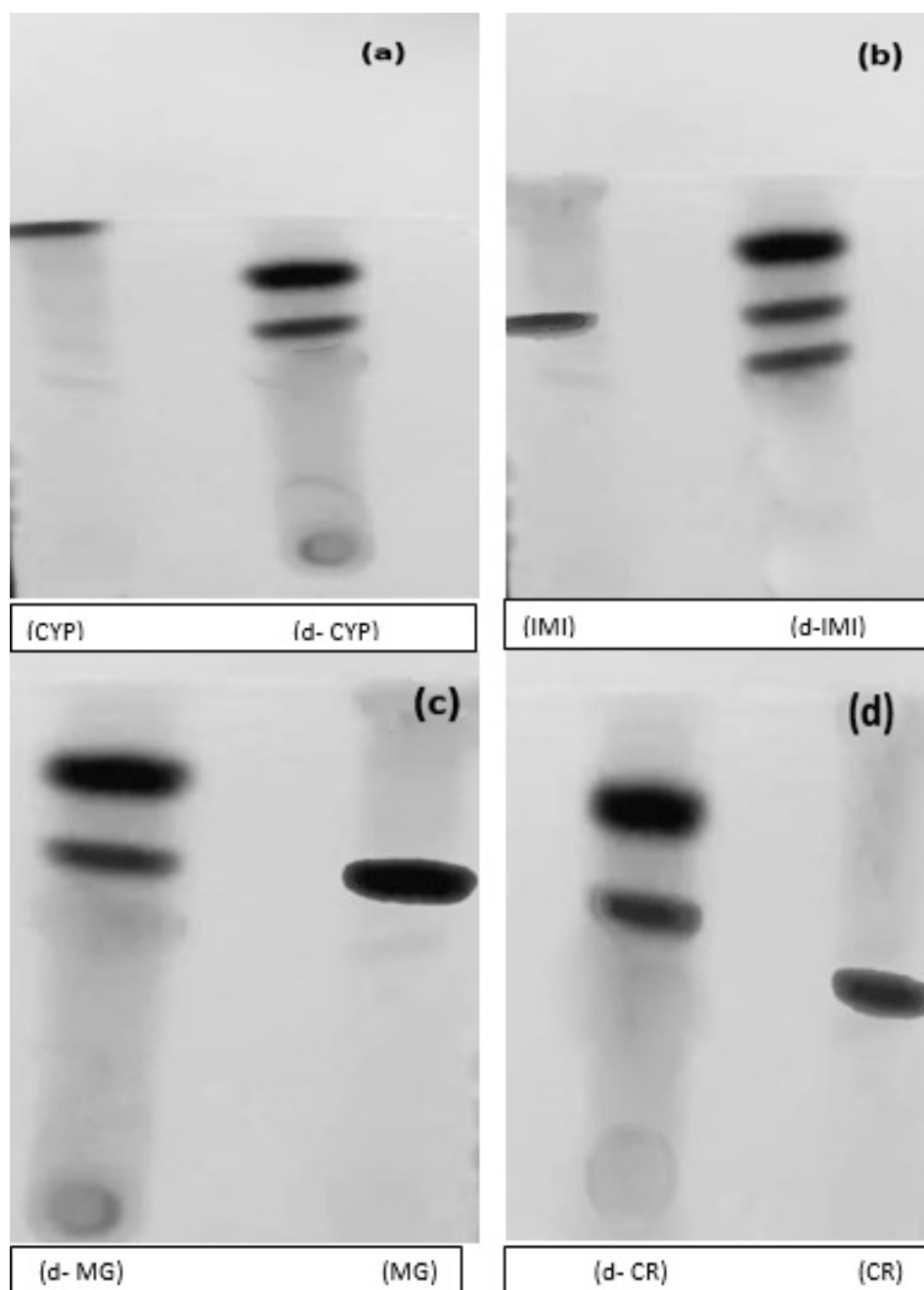


Figure S2. Thin Layer chromatography analysis of (a). CYP before and after biodegradation with P7, (b). IMI before and after degradation with P11, (c). MG before and after degradation with D6, (d). CR before and after degradation with D4.

d- CYP, d-IMI, d-MG, d-CR = degraded CYP, degraded IMI, degraded MG and degraded CR respectively. P7 = *B. thuringiensis* + *B. cereus*, P11 = *B. thuringiensis* + *E. hormaechei* + *Bacillus* sp. (5A) + *B. cereus*, D6 = *Bacillus* sp. (CF3) + *Bacillus* sp. (DF4) and D4 = *L. sphaericus* + *Bacillus* sp. (CF3).